

OCT 08 2002

PATENT & TRADEMARK OFFICE

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

6

Complete if Known

Application Number	10/075,896
Filing Date	February 12, 2002
First Named Inventor	Stanley S. Toncich
Art Unit	2821
Examiner Name	To Be Assigned

Attorney Docket Number UTL 00111

U.S. PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
Stan	1	US- 5,729,239	03-17-1998	Rao, Jaganmohan B.L.	
Stan	2	US- 6,049,726	04-11-2000	Gruenwald, Werner, et al.	
Stan	3	US- 6,160,524	12-12-2000	Wilber, William	
Stan	4	US- 6,198,441 B1	03-06-2001	Okabe, Hiroshi	
Stan	5	US- 6,028,561	02-22-2000	Takei, Ken	
Stan	6	US- 5,973,567	10-26-1999	Heal, Mark D., et al.	
Stan	7	US- 4,475,108	10-02-1984	Moser, Kenneth R.	Abstract, Fig. 1
Stan	8	US- 3,678,305	07-18-1972	George, Edward	
Stan	9	US- 3,918,012	11-04-1975	Peuzin, Jean Claude	
Stan	10	US- 5,450,092	09-12-1995	Das, Satyendranath	
Stan	11	US- 6,333,719 B1	12-25-2001	Varadan, Vijay K.	
Stan	12	US- 5,212,463	05-18-1993	Babbitt, Richard W., et al.	
Stan	13	US- 4,733,328	03-22-1988	Blazej, Daniel C.	
Stan	14	US- 5,617,104	04-01-1997	Das, Satyendranath	
Stan	15	US- 5,307,033	04-26-1994	Koscica, Thomas E., et al.	
Stan	16	US- 5,427,988	06-27-1995	Sengupta, Louise, et al.	
Stan	17	US- 5,557,286	09-17-1996	Varadan, Vijay K., et al.	
Stan	18	US- 5,561,407	10-01-1996	Koscica, Thomas E., et al.	
Stan	19	US- 5,589,845	12-31-1996	Yandrofski, Robert M.	
Stan	20	US- 5,496,795	03-05-1996	Das, Satyendranath	

FOREIGN PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
Stan	21	WO 00/62367	10-19-2000	Carlsson, Erik, et al.		
Stan	22	JP 29-05-00 2001338839	07-12-2001	Tsuneo, Mishima		
Stan	23	EP 0 637 131 A1	02-01-1995	Fujita Masanori		
Stan	24	EP 0 843 374 A2	05-20-1998	uller, Frithjof E., et al.	Abstract, Fig. 1	
Stan	25	EP 0 638 953 A1	02-15-1995	Yasuoka, et al.		
Stan	26	WO 00/35042	06-15-2000	engupta, Louise, et al.		
Stan	27	EP 0 680 108 A1	11-02-1995	Atokawa, Masayuki		
Stan	28	EP 0 881 700 A1	12-02-1998	Atokawa, Masayuki		
Stan	29	WO 00/28613	05-18-2000	engupta, Louise, et al.		
Stan	30	DE 40 36 866 A1	07-25-1991	Yamamoto, Masaki		

Examiner
Signature*W. J. Werner*Date
Considered

9/8/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 6

Complete if Known

Application Number	10/075,896
Filing Date	February 12, 2002
First Named Inventor	Stanley S. Toncich
Art Unit	2821
Examiner Name	To-Be-Assigned Wimer

Attorney Docket Number UTL 00111

U.S. PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
	31	us- 6,097,263	08-01-2000	Mueller, Carl H., et al.	
	32	us- 5,987,314	11-16-1999	Salto, Atsushi	
	33	us- 5,472,935	12-5-1995	Yandrofski, Robert, et al.	
	34	us- 4,799,066	01-17-1989	Deacon, Malcolm J.	
	35	us- 5,166,857	11-24-1992	Avanic, Branko, et al.	
	36	us- 5,880,921	03-09-1999	Tham, J.L. Julian, et al.	
	37	us- 5,640,042	06-17-1997	Koscica, Thomas E., et al.	
	38	us- 4,835,499	05-30-1989	Pickett, Michael N.	Abstract, Fig. 3
	39	us- 3,413,543	11-26-1968	Schubring, et al.	Col. 4, lines 3-31, Fig. 2
	40	us- 5,945,887	08-31-1999	Makino, Toshihiro, et al.	
	41	us- 5,973,568	10-26-1999	Shapiro, Gary, et al.	
	42	us- 5,216,392	06-01-1993	Fraser, Randall S.	
	43	us- 3,676,803	07-11-1972	Simmons, William J.	
	44	us- 3,836,874	09-17-1974	Maeda, Minoru, et al.	
	45	us- 5,778,308	07-07-1998	Sroka, Peter, et al.	
	46	us- 5,777,524	07-07-1998	Wojewoda, Carl E., et al.	
	47	us- 6,052,036	04-18-2000	Enstrom, Hakan, et al.	
	48	us- 6,292,143 B1	09-18-2001	Romanofsky, Robert R.	
	49	us- 5,617,104	04-01-1997	Das, Satyendranath	
	50	us-			

FOREIGN PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
	51	EP 1 043 741 A2	10-11-2000	Klee, Mareike, et al.		
	52	EP 0 795 922 A1	09-17-1997	Tsuru, Teruhisa, et al.		
	53	EP 0 909 024 A2	04-14-1999	Nakamichi, et al.		
	54	WO 00/79648 A1	12-28-2000	Varadan, Vijay K., et al.		
	55	WO 00/79645 A1	12-28-2000	Falk, Kent, et al.		
	56	WO 94/13028	06-09-1994	Yandrofski, et al.	Col. 8, lines 9-26,	
	57				Figs. 30-31; p. 14,	
	58				par. 4, abst.,	
	59				figs. 2, 4, 11	
	60					

Examiner
Signature*Mr. Wimer*Date
Considered

9/8/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

3

of

6

Complete if Known

Application Number	10/075,896
Filing Date	February 12, 2002
First Named Inventor	Stanley S. Toncich
Group Art Unit	2821
Examiner Name	To Be Assigned
Attorney Docket Number	UTL 00111

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
<i>ST</i>	61	A. Presser, "Varactor-Tunable, High-Q Microwave Filter," RCA Review, Vol. 42, Dec. 1981, pp. 691-705.	
<i>ST</i>	62	C. Chang and T. Itoh, "Microwave Active Filters Based on Coupled Negative Resistance Method," IEEE Trans. on Microwave Theory and Techniques, Vol. 38, No. 12, Dec. 1990, pp. 1879-1884.	
<i>ST</i>	63	P. Katzin, B. Bedard, and Y. Ayasli, "Narrow-Band MMIC Filters with Automatic Tuning and Q-Factor Control," 1993 IEEE MTT-S Int. Microwave Symp. Digest pp.403-406.	
<i>ST</i>	64	B. Hopf, I. Wolff, and M. Guglielmi, "Coplanar MMIC Active Bandpass Filters Using Negative Resistance Circuits," 1994 IEEE MTT-S Symposium Digest, pp. 1183-1185.	
<i>ST</i>	65	U. Karacaoglu and I.D. Robertson, "High Selectivity Varactor-Tuned MMIC Bandpass Filter Using Lossless Active Resonators," 1994 IEEE MTT-Symposium Digest, pp. 1191-1194.	
<i>ST</i>	66	B. Nauta, "A CMOS Transconductance-C Filter Technique for Very High Frequencies," IEEE Journal of Solid-State Circuits, Vol. 27, No. 2, February 1992, pp. 142-153.	
<i>ST</i>	67	K Fujita, H. Itoh, R. Yamamoto, "A 15.6 GHz Commercially Based 1/8 GaAs Dynnamic Presealer," 1989 IEEE GaAs IC Symposium, pp. 113-116.	
<i>ST</i>	68	J. Smuk, P. Katzin, "MMIC Phase Locked L-S Band Oscillators," 1994 IEEE GaAs Symposium Digest, pp. 27-29.	
<i>ST</i>	69	S. R. Chandler, I. C. Hunter, and J.G. Gardiner, "Active Varactor Tunable Bandpass Filter," IEEE Microwave and Guided Wave Letters, Vol. 3, No. 3, March 1993, pp. 70-71.	
<i>ST</i>	70	I. C. Hunter and John D. Rhodes, "Electronically Tunable Microwave Bandpass Filters," IEEE Trans. on MTT, Vol. 30, No. 9, September 1982, pp. 1354-1367.	
<i>ST</i>	71	S. Toyoda, " Quarter-wavelength Coupled Variable Bandstop and Bandpass Filters Using Varactor Diodes," IEEE Trans. on Mtt, Vol. 30, No. 9, September 1982, pp. 1387-1389.	

Examiner
Signature

Date
Considered

9/8/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

4

of

6

Complete if Known

Application Number	10/075,896
Filing Date	February 12, 2002
First Named Inventor	Stanley S. Toncich
Group Art Unit	2821
Examiner Name	To Be Assigned
Attorney Docket Number	UTL 00111

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>ST</i>	72	B. Yu. Kapilevich, "Variety of Approaches to Designing Microwave Active Filters," Proc. 27th European Microwave Conf., Jerusalem, Vol. 1, 1997, pp. 397-408.	
<i>ST</i>	73	B. Yu. Kapilevich, "Understand the Operation of Channelized Active Filters," Microwaves & RF, January 1997, pp. 89-92.	
<i>ST</i>	74	M. Dishal, "Alignment and Adjustment of Synchronously Tuned Multiple Resonator-Circuit Filters" Proc. IRE 39, November 1951, pp. 1448-1455.	
<i>ST</i>	75	S. B. Cohn, "Dissipation Loss in Multiple-Coupled-Resonator Filters," Proc. IRE 47, August 1959, pp. 1342-1348.	
<i>ST</i>	76	G. L. Matthaei, "An Electronically Tunable Up-Converter," Proc. IRE 49, November 1961, pp. 1703-1704.	
<i>ST</i>	77	E. G. Fubini and E.A. Guillemin, "Minimum Insertion Loss Filters," Proc. IRE 47, January 1959, pp. 37-41.	
<i>ST</i>	78	W.J. Getsinger, "Prototypes for Use in Broadbanding Reflection Amplifiers," IEEE Trans. PTGMMT-11, November 1963, pp. 486-497.	
<i>ST</i>	79	E.S. Kuh and M. Fukada, "Optimum Synthesis of Wide-Band Parametric Amplifiers and Converters," IRE Trans. PCCT-8, December 1961, pp.410-415.	
<i>ST</i>	80	W. J. Getsinger and G.L. Matthaei, "Some Aspects of the Design of Wide-Band Up-Converters and Nondegenerate Parametric Amplifiers," IEEE Trans. PTGMMT-12, January 1964, pp. 77-87.	
<i>ST</i>	81	R. L. Slevin, "Design of a Tunable Multi-Cavity Waveguide Band-Pass Filter," 1959 IRE National Convention Record, Part 3, pp. 91-112.	
<i>ST</i>	82	J.J. Taub and B. F. Bogner, "Design of Three-Resonator Dissipative Band-Pass Filters Having Minimum Insertion Loss," Proc. IRE 45, pp. 681-687 (May 1957).	

Examiner
Signature

McWhirter

Date
Considered

9/8/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

<p>Substitute for form 1449B/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p>				<p>Complete if Known</p>	
Sheet	5	of	6	Application Number	10/075,896
				Filing Date	February 12, 2002
				First Named Inventor	Stanley S. Toncich
				Group Art Unit	2821
				Examiner Name	To Be Assigned
				Attorney Docket Number	UTL 00111

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials'	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T2
	83	K.L. Kotzebue, "Broadband Electronically-Tunable Microwave Filters," 1960 IRE Wescon Convention Record, Part 1, pp.21-27.	
	84	J.P. Louhos and I. Pankinaho, "Electrical Tuning of Integrated Mobile Phone Antennas," Nokia Mobile Phones, pp. 69- 97 (September 15, 1999).	
	85	P. K. Panayi, M. Al-Nuaimi, and L. P. Ivrissimtzis, "Tuning Techniques for the Planar Inverted-F Antenna," National Conference on Antennas and Propagation Publication, No. 461, pp. 259-262 (April 1999).	
	86	Satoshi Makioka, et al., "A High Efficiency GaAs MCM Power Amplifier for 1.9 GHz Digital Cordless Telephones," IEEE 1994 Microwave and Millimeter-Wave Monolithic Circuits Symposium, pp. 51-54 (1994).	
	87	V. K. Varadan, K. A. Jose, V. V. Varadan, "Design and Development of Electronically Tunable Microstrip Antennas," IOP Publishing Ltd., pp.238-242 (1999).	
	88	Communication Relating to the Results of the Partial International Search: PCT/IB 02/01077 (2002).	
	89	International Search Report: PCT/IB 02/01086 (June 24, 2002).	
	90	International Search Report: PCT/IB 02/01078 (July 10, 2002).	
	91	International Search Report: PCT/IB 02/01087 (July 19, 2002).	
	92	International Search Report: PCT/IB 02/01107 (July 11, 2002).	
	93	International Search Report: PCT/IB 02/01120 (July 11, 2002).	

Examiner Signature		Date Considered	7/8/03
-----------------------	---	--------------------	--------

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

6

of

6

Complete if Known

Application Number	10/075,896
Filing Date	February 12, 2002
First Named Inventor	Stanley S. Toncich
Group Art Unit	2821
Examiner Name	To Be Assigned
Attorney Docket Number	UTL 00111

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
<i>Stan</i>	94	International Search Report: PCT/IB 02/01098 (July 4, 2002).	
<i>Stan</i>	95	International Search Report: PCT/IB 02/01082 (July 8, 2002).	
<i>Stan</i>	96	International Search Report: PCT/IB 02/01144 (July 12, 2002).	
<i>Stan</i>	97	International Search Report: PCT/IB 02/01026 (June 28, 2002).	
<i>Stan</i>	98	International Search Report: PCT/IB 02/01027 (June 25, 2002).	
	99		
	100		
	101		
	102		
	103		
	104		

Examiner
Signature

Date
Considered

9/8/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number¹ (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.